

1. The following is part of a display on the notice board of a bank in the United Kingdom. It shows the exchange rate between one British pound (GBP) and other currencies.

EXCHANGE RATES		
	Bank buys foreign currency	Bank sells foreign currency
Denmark (KR)	11.38	10.78
Finland (MKK)	7.00	6.60
France (FFR)	10.05	9.45
Germany (DM)	2.854	2.798
Greece (DR)	292	266
NO COMMISSION CHARGED		

Geraldine eats a meal in a restaurant while on holiday in Greece. The meal costs 4256 drachma (DR).

- (a) Use the **bank-selling** price to calculate the cost of the meal in British pounds.

The Williams family go to Germany. Before leaving, they change 600 GBP into German marks.

- (b) Calculate the number of German marks they receive for 600 GBP , giving your answer correct to two decimal places.

They spend 824 DM in Germany, and on returning to the United Kingdom, they change their remaining German marks into British pounds.

- (c) Calculate the number of British pounds they receive, correct to two decimal places.

Working:

Answers:

- (a)
(b)
(c)

(Total 4 marks)

2. The exchange rate from US dollars (USD) to French francs (FFR) is given by $1 \text{ USD} = 7.5 \text{ FFR}$. Give the answers to the following correct to **two** decimal places.

- (a) Convert 115 US dollars to French francs.
(b) Roger receives 600 Australian dollars (AUD) for 2430 FFR. Calculate the value of the US dollar in Australian dollars.

Working:

Answers:

- (a)
(b)

(Total 8 marks)

3. Zog from the planet Mars wants to change some Martian Dollars (MD) into US Dollars (USD). The exchange rate is 1 MD = 0.412 USD. The bank charges 2% commission.

(a) How many US Dollars will Zog receive if she pays 3500 MD?

Zog meets Zania from Venus where the currency is Venusian Rupees (VR). They want to exchange money and avoid bank charges. The exchange rate is 1 MD = 1.63 VR.

(b) How many Martian Dollars, to the nearest dollar, will Zania receive if she gives Zog 2100 VR?

Working:

Answers:

(a)

(b)

(Total 8 marks)

4. A bank in Canada offers the following exchange rate between Canadian dollars (CAD) and Euros (EUR). The bank sells 1 CAD for 1.5485 EUR and buys 1 CAD for 1.5162 EUR. A customer wishes to exchange 800 Canadian dollars for Euros.
- (a) Find how many Euros the customer will receive.
 - (b) The customer has to cancel his trip and changes his money back later when the rates are “sells 1 CAD = 1.5546 EUR, buys 1 CAD = 1.5284 EUR”. Use the “we sell” information to find how many Canadian dollars he receives.
 - (c) How many Canadian dollars has he lost on the transaction?

Working:

Answers:

- (a)
- (b)
- (c)

(Total 6 marks)

5. Sven is travelling to Europe. He withdraws \$800 from his savings and converts it to euros. The local bank is buying euros at \$1: €0.785 and selling euros at \$1: €0.766.
- Use the appropriate rate above to calculate the amount of euros Sven will receive.
 - Suppose the trip is cancelled. How much will he receive if the euros in part (a) are changed back to dollars?
 - How much has Sven lost after the two transactions? Express your answer as a percentage of Sven's original \$800.

Working:

Answers:

-
-
-

(Total 6 marks)

1. (a) $4256 \div 266 = 16$ GBP (A1)

Note: Penalize only once in parts (b) and (c) if the buying and selling price are consistently confused throughout the question. Allow (ft) marks.

- (b) $600 \times 2.798 = 1678.80$ DM (A1)

- (c) $1678.80 - 824 = 854.80$ DM (M1)
 $= (854.80 \div 2.854)$ GBP (A1)
 $= 299.51$ GBP (2 d.p.) (A1)

Note: Penalize only once for answer not given to 2 d.p.

[4]

2. (a) $115 \times 7.5 = 862.5$ (M1)(A1)
 862.50 USD (A1) (C3)

- (b) **METHOD 1**
 $\frac{2430}{600} = \frac{1\text{FFR}}{x\text{AUD}}$ (M1)

1 FFR = 0.247 AUD	(A1)
1 USD = 7.5 FFR = 7.5×0.247 AUD = 1.8518...	(M1)(A1)
1 USD = 1.85 AUD (2 d.p.)	(A1)(C5)

METHOD 2

2430 FFR = 600 AUD	(M1)
1 FFR = $\frac{600}{2430}$ AUD (= 0.247 AUD)	(M1)
1 USD = 7.5 FFR = $7.5 \times \frac{603}{2430}$ = 1.8518...	(M1)(A1)
1 USD = 1.85 AUD (2 d.p.)	(A1)(C5)

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3.	(a)	3500×0.412 USD = 1442 USD	(M1)(A1)
		1442×0.98 = 1413.16 USD	(M2)(A1) (C5)

OR

3500×0.412 USD = 1442 USD	(M1)(A1)
$1442 - 1442 \times 0.02$ = 1413.16 USD	(M2)(A1)

(accept nearest \$1413 or 3 s.f. \$1410).

(b) $\frac{2100}{1.63} = 1288.34$ (M1)(A1)
 = 1288 MD to the nearest dollar. (A1) (C3)
 [8]

4. (a) 800×1.5162 for multiplying by 1.5162 (M1)
 = 1212.96 EUR (accept 1213) (A1) (C2)

(b) $1212.96 / 1.5546$ (M1)
 = 780.24 (accept 780) (A2) (C3)

(c) 19.76 CAD (A1) (C1)
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5. (a) 800×0.766
 = \$612.80 (\$613) (Accept \$612.8 as an exact answer.) (M1)(A1) (C2)

(b) $\frac{612.80}{0.785}$ (M1)
)
 = \$780.64 (\$781 or \$780.89 if following from 613) (A1)(ft) (C2)

Note: If the wrong rate or the wrong process are chosen in part (a), then follow through to parts (b) and (c) using the alternative rate or process.

(c) $800 - 780.64 = \$19.36$ (A1)
 (ft)

$\frac{19.36}{800} \times 100\% = 2.42\%$ (A1)(ft) (C2)

Note: 780.89 follows through to 2.39% and 781 follows to 2.38%.

[6]